U.S. EPA Environmental Technology Verification Program
Advanced Monitoring Systems (AMS) Center

Water Stakeholder Committee Teleconference
Monday, February 6, 2006
1 pm – 2:30 pm Eastern Standard Time

Teleconference Meeting Minutes

AGENDA

Welcome, Agenda, and Meeting Objectives	Rachel Sell, Battelle
Stakeholder Introductions and Insights	Rachel Sell/Stakeholders
Update on Verification Activities ▪ Nutrient Monitors ▪ Arsenic Monitors (Round 3) ▪ Beach Monitoring	Ann Louise Sumner, Battelle
Status of Co-Funding Opportunities ▪ Ballast Water Monitoring ▪ Microcystin ELISA Test Kits ▪ Dissolved Oxygen Probes	Amy Dindal, Battelle
Hot Topics	Rachel Sell
Distribution of *The Monitor* Newsletter	Amy Dindal
Future Meeting Schedule	Rachel Sell
Wrap-up and Review of Action Items	Rachel Sell
Adjourn	

ATTENDEES

Stakeholder Committee Members:
John Carlton, Alabama Department of Environmental Management (retired)
Marty Link, Nebraska Department of Environmental Quality
Alan Mearns, Hazardous Materials Response Division, National Oceanic and Atmospheric

Administration (NOAA)

Vito Minei, Division of Environmental Quality Suffolk County Department of Health Services
Lisa Olsen, U.S. Geological Survey (USGS)
Geoff Scott, NOAA/NOS Center for Coastal Environmental Health & Biomolecular Research
Peter Tennant, Ohio River Valley Water Sanitation Commission (ORSANCO)
Ken Wood, DuPont

ETV AMS Center Staff:
Amy Dindal, Battelle
Bob Fuerst, EPA/RTP
Rachel Sell, Battelle
Ann Louise Sumner, Battelle

Welcome, Agenda, and Meeting Objectives

Rachel Sell, Battelle AMS Center Stakeholder Committee Coordinator, welcomed the committee stakeholders and introduced a new stakeholder, Lisa Olsen, to the Water Stakeholder Committee.

Ms. Olsen is a Water-Quality Specialist for the USGS's California Water Science Center. She provides guidance for the USGS's water-quality programs in the State of California. She provides technical support and review for projects and reports, to ensure that the approaches used are scientifically sound. She also assists with the selection of field and laboratory methods, and troubleshoots quality-assurance problems. She coordinates USGS's internal evaluations of laboratories used by the USGS in California. Ms Olsen also participates on a program team determining possible future directions for USGS work in the State of California. Currently, she is assisting the USGS in Maryland with plans for real-time water-quality monitoring on the Potomac River and other sites.

Stakeholder Introductions and Insights

Ms. Sell asked each stakeholder to provide a brief introduction and describe his or her role within his or her organization.

Amy Dindal, Battelle AMS Center Verification Testing Leader, added that she hopes the stakeholder group likes this format of the teleconference; she is hoping that this process will encourage stakeholder feedback on a more continual basis. Ms. Sell said that, if the group likes the format, the idea would be to have quarterly teleconferences, as well as in-person meetings every 12 to 18 months.

Update on Technology Categories

Ann Louise Sumner, Battelle AMS Center Verification Test Coordinator, provided an update on three technology categories. She reviewed slides from a PowerPoint presentation distributed to stakeholders before the teleconference. Two water verifications, nutrient analyzers for environmental applications and beach monitoring, are in the planning stages and the arsenic analyzers (Round 3) verification is scheduled to begin in late February.

Dr. Sumner described the status of the **Nutrient Analyzers** verification. Testing of nutrient analyzers has two applications, which include industrial and environmental monitoring.

ETV testing for industrial monitoring was conducted in May through June of 2005 in collaboration with DuPont. Dr. Sumner noted that two vendors participated and their respective reports were finalized in September of 2005.

For the second application, environmental monitoring, she updated the committee on a potential co-funding opportunity with USGS, Ohio EPA (OEPA), and Illinois EPA (IEPA) that was not funded, but commented there was still continued vendor interest. The consensus of the participating stakeholders was that this is still an area of high priority for testing. She then asked the committee for co-funding suggestions.

- John Carlton and Vito Minei suggested checking with an arm of USDA to see if they would be interested in supporting a test for environmental monitoring applications.

- Mr. Carlton also suggested checking into EPA's National Estuary Program (http://www.epa.gov/nep/) and NOAA's National Estuarine Research Reserve System (http://nerrs.noaa.gov/).

- Ms. Olsen suggested checking with the National Water Quality Monitoring Council (http://water.usgs.gov/wicp/acwi/monitoring/) and said that she could provide a contact at the USDA Beltsville Agricultural Research Center. USDA staff in Beltsville have expertise on water-quality fate and transport projects and might be able to provide a nutrient monitoring contact.

- Geoff Scott recommended checking with the NOAA-funded Alliance for Coastal Technologies (ACT) http://www.act-us.info/ as they might be interested in participating in such a test.

- Mr. Minei also suggested contacting the Water Environment Federation (WEF) and the Water Environment Research Foundation (WERF). Ken Wood agreed that his would be a good idea.

Dr. Sumner reviewed slides detailing the upcoming verification of two **Arsenic Analyzers (Round 3).** The verification is scheduled to begin in late February. She asked Mr. Minei and Marty Link if they would be interested in serving as peer reviewers for this round of testing. They both agreed to provide peer review support for the verification.

Testing of Beach Monitoring technologies is planned for Summer of 2006. Four vendors have signed vendor agreements and three additional vendors have verbally communicated interest in participating in the verification. She reviewed two collaborators for the verification, Southern California Coastal Water Research Program (SCCWRP) (http://www.sccwrp.org/) and EPA's National Epidemiological and Environmental Assessment of Recreational (NEEAR) Water Study. She concluded by reviewing potential collaborators and asked the committee for suggestions.

Dr. Scott suggested looking into NOAA's Oceans and Human Health Initiative (OHHI) (http://www.ogp.noaa.gov/mpe/ohi/). They are working on developing new methods for source detection and source tracking tools.

Dr. Scott said that he would take our co-funding request to this Initiative, but, due to a budget decrease at NOAA, he did not expect that funding would be available until FY07. He also added that there might be supplemental hurricane response funds available. An action item was made for Dr. Scott to cycle back to the interagency task force on hurricane preparedness, of which he is a member, to see if there might be an opportunity to support testing in this application.

Mr. Minei offered to provide in-kind support by hosting a beach monitoring verification test site.

Status of Co-Funding Opportunities

Ms. Dindal provided an update on the status of three co-funding opportunities:

Vendor recruitment will commence **Ballast Water Monitoring**, once co-funding from the Coast Guard is secured.

A proposal was submitted with Nebraska DEQ to the Nebraska Environmental Trust Fund to evaluate **Immunoassay Test Kits for Microcystins**. Ms. Link noted that Nebraska is very interested in pursuing the collaborative testing of this technology. (Post-meeting note: Received notice on February 8 that the proposal was not recommended for funding.)

Ms. Olsen recommended checking with the water agencies in California (e.g., California Department of Health Services) to see if there is a need or opportunity there. She noted that elevated microcystins levels were found in the San Francisco Bay Delta and the Klamath River in Oregon. The San Francisco Bay Delta provides water to approximately 22 million people.

Ms. Dindal reported that the AMS Center's proposal to New York State Energy Research and Development Authority (NYSERDA) on **Dissolved Oxygen Monitors** was not funded. Ms. Dindal asked the committee if this was still a priority area. Ms. Olsen said it was a priority area for her and could provide websites to a couple of vendors, such as Rosemount Analytical Inc. Mr. Minei concurred and added that he's had biofouling problems with the membranes of dissolved oxygen sensors for 30 years.

Alan Mearns and Dr. Scott offered to check on what NOAA's National Centers for Coastal Ocean Science (NCCOS) Kasitsna Bay Laboratory was doing in this area and if there would be any potential opportunities for collaboration (http://www.ccfhr.noaa.gov/About%20Us/kasitsna).

Hot Topics

Ms. Sell asked the stakeholders if they were aware of any new opportunities that the ETV/AMS Center should be exploring, and when making a recommendation, to indicate the level of importance or priority the technology category exhibits.

Dr. Mearns recommended a verification of monitors for endocrine disrupting compounds (EDCs). Mr. Minei said this was a big catch-all group and that he couldn't single out a particular

technique or probe that would test for this ever-growing family of compounds. There is a big question of how to test these compounds. The comment was then made that these compounds continue to be a topic of interest in surface water; however, these types of contaminants are destroyed in groundwater.

Dr. Scott said that a vertebrate bioassay currently exists and that work is being done to develop a new bioassay using invertebrates; however, no commercially available bioassays currently exist. After some discussion, the group decided that a test of estrogen ELISAs would be a good starting point for EDCs.

During the discussion of ***in-situ*** **algal monitoring**, Dr. Scott said that a number of vendors exist who can measure toxins produced by harmful algae, and offered to send a listing of these different assays.

Mr. Minei felt that perchlorate was a fairly widespread contaminant as well as a national problem. Ms. Olsen said that a few technologies were under development for the military, and offered to forward Battelle information on these technologies after the call. Dr. Scott suggested inviting a speaker from ACT to the next in-person meeting.

For another potential lead, Dr. Mearns offered to send contact information and make a contact with a citizen's based monitoring group, the Northwest Straits Commission (http://www.nwstraits.org/nsc.html) to investigate the possibility for ETV co-funding opportunities.

Distribution of *The Monitor* Newsletter

Ms. Dindal described the current distribution of *The Monitor* newsletter. After a brief discussion, the stakeholders felt receiving one hardcopy of *The Monitor* each would be sufficient. In addition, a pdf of *The Monitor* would be emailed to stakeholders (who could in turn forward to others) in lieu of additional hardcopies. If stakeholders need additional hard copies they will contact Battelle (or provide additional names to add to *The Monitor* mailing list).

Future Meeting Schedule

Ms. Sell said that in order to get more continual input and feedback from the stakeholders, quarterly stakeholder teleconferences may be helpful. She noted the next teleconference would be planned for in the May timeframe. Ms. Sell said it was suggested at the last meeting to have the next in-person meeting in San Francisco and would likely be held in the Fall of 2006.

Ms. Sell said that teleconference formats may vary; one call might be spent discussing the results of a single verification test, while another call may highlight several tests in the planning stages. She reiterated that the Water Stakeholder Committee would still have in-person meetings but that the in-person meetings would occur less frequently if we continue to do quarterly conference calls.

It was agreed by several stakeholders that the conference call format was very efficient; however, it is important to continue to have face-to-face in-person meetings. Dr. Scott said that having the meeting in the Fall of 2006 could be problematic because he, like others, are very

busy from the first part of August until mid-October. Mr. Minei recommended continuing with the original plan to have the next in-person meeting in May. It also was suggested to consider having the next in-person meeting in conjunction with a larger meeting.

Committee members did not wish to explore the idea of web-based conferencing (e.g. WebEX or WebMeeting).

Wrap-up and Review of Action Items

Ms. Sell reviewed the action items brought forth on the call:

1. If anyone has questions about the Nutrient Analyzers, Arsenic Analyzers, and Beach Monitoring slides, follow up with Dr. Sumner or Ms. Anne Gregg, the Verification Test Coordinators for these tests, after the call. Their contact information is:

   Nutrient Analyzers & Beach Monitoring
   Ann Louise Sumner, sumnera@battelle.org, (614) 424-3973,

   Arsenic Analyzers (Round 3)
   Anne Gregg, gregga@battelle.org, (614) 424-7419.

2. Battelle will follow up on the co-funding suggestions provided for the nutrient analyzers for environmental applications verification.
3. Ms. Olsen will pass along contacts at the USDA to Battelle. (Action completed after the teleconference.)
4. Battelle will follow up on the co-funding suggestions provided for the beach monitoring verification. Dr. Scott will cycle back to interagency task force on testing these technologies for hurricane response/emergency preparedness applications.
5. Ms. Olsen will send web links of a couple dissolved oxygen monitor vendors to Battelle. (Action completed after the teleconference.)
6. Dr. Mearns and Dr. Scott will check on potential opportunities in the area of dissolved oxygen monitoring at NOAA's National Centers for Coastal Ocean Science (NCCOS) Kasitsna Bay Laboratory.
7. Dr. Scott will send a list of assay vendors for toxins produced by harmful algae.
8. Ms. Olsen will forward information on perchlorate technologies under development for the military to Battelle. (Action completed after the teleconference.)
9. Dr. Mearns will make contact with the Northwest Straits Commission and investigate ETV co-funding opportunities.

Ms. Sell thanked all of the stakeholders for attending the meeting and contributing so much to ETV. The call adjourned at 2:45 pm EST.